

Financial Management Concepts

What is Financial Management?

- ▶ Financial Management means planning, organizing, directing and controlling the financial activities such as **procurement and utilization of funds** of the enterprise.
- ▶ Financial Management deals with how the corporation obtains the funds and how it uses them
- ▶ It is concerned with the efficient use of an important economic resource namely, capital funds - Solomon

Financial Management

- ▶ Finance may be defined as the art and science of managing money. Finance also is referred as the provision of money at the time when it is needed
- ▶ Business finance can broadly be defined as the activity concerned with planning, raising, controlling, administering of the funds used in the business

Need of Finance

- Capital required for a business can be classified under two main categories, viz.,
 - Fixed Capital, and
 - Working Capital
- Every business needs funds for two purpose
 - Establishment
 - To Carry out day to day activities
- Long term funds are required to create production facilities through purchase of fixed assets such as plant, machinery, land, building, furniture, etc.

Need of Finance

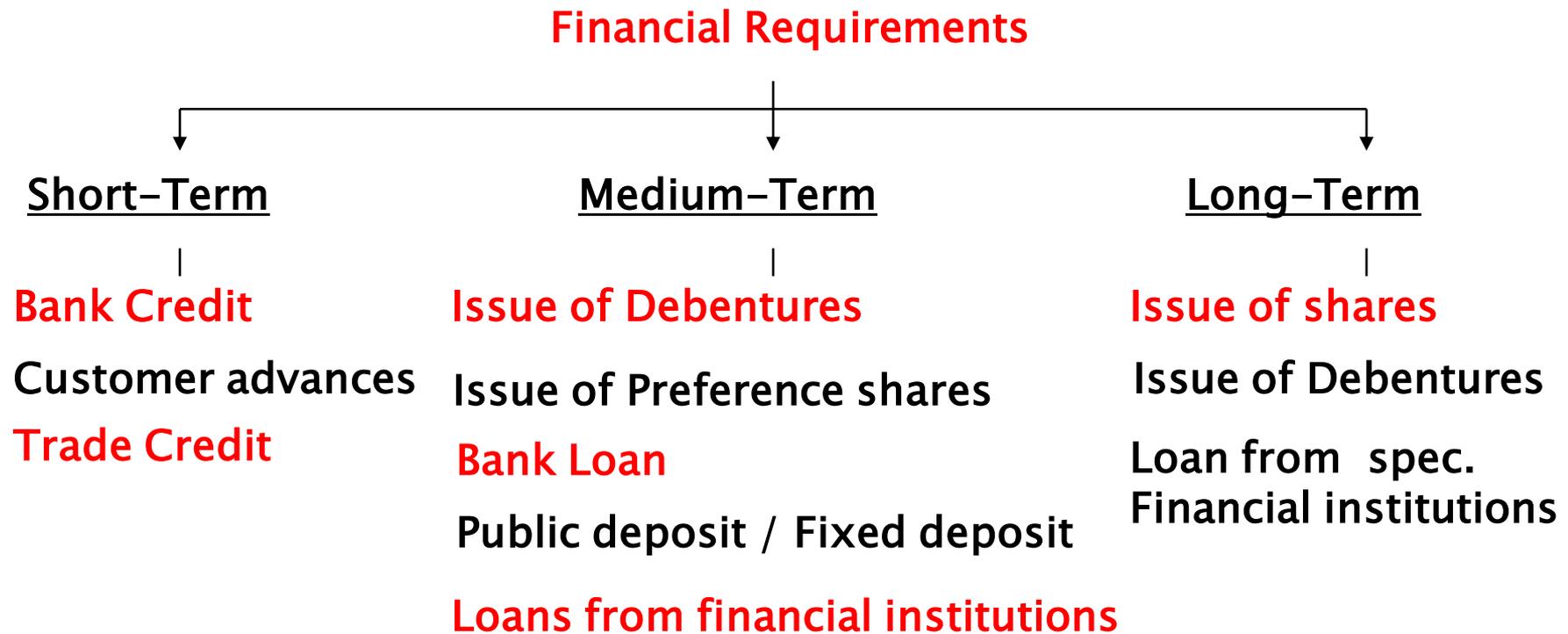
- Investment in these asset represent that part of firm's capital which is blocked on permanent or fixed basis and is called fixed capital
- Funds are also needed for short-term purposes for the purchase of raw materials, payment of wages and other day to day expenses, etc. These funds are known as working capital.

Need of Finance

- In fact finance is so indispensable today that it is rightly said that it is the life blood of enterprise
- Without adequate finance, no enterprise can possibly accomplish its objectives
- In every concern there are two methods of raising finance, viz.,
 - Raising of owned capital,
 - Raising of borrowed capital

Sources of Finance/Funds

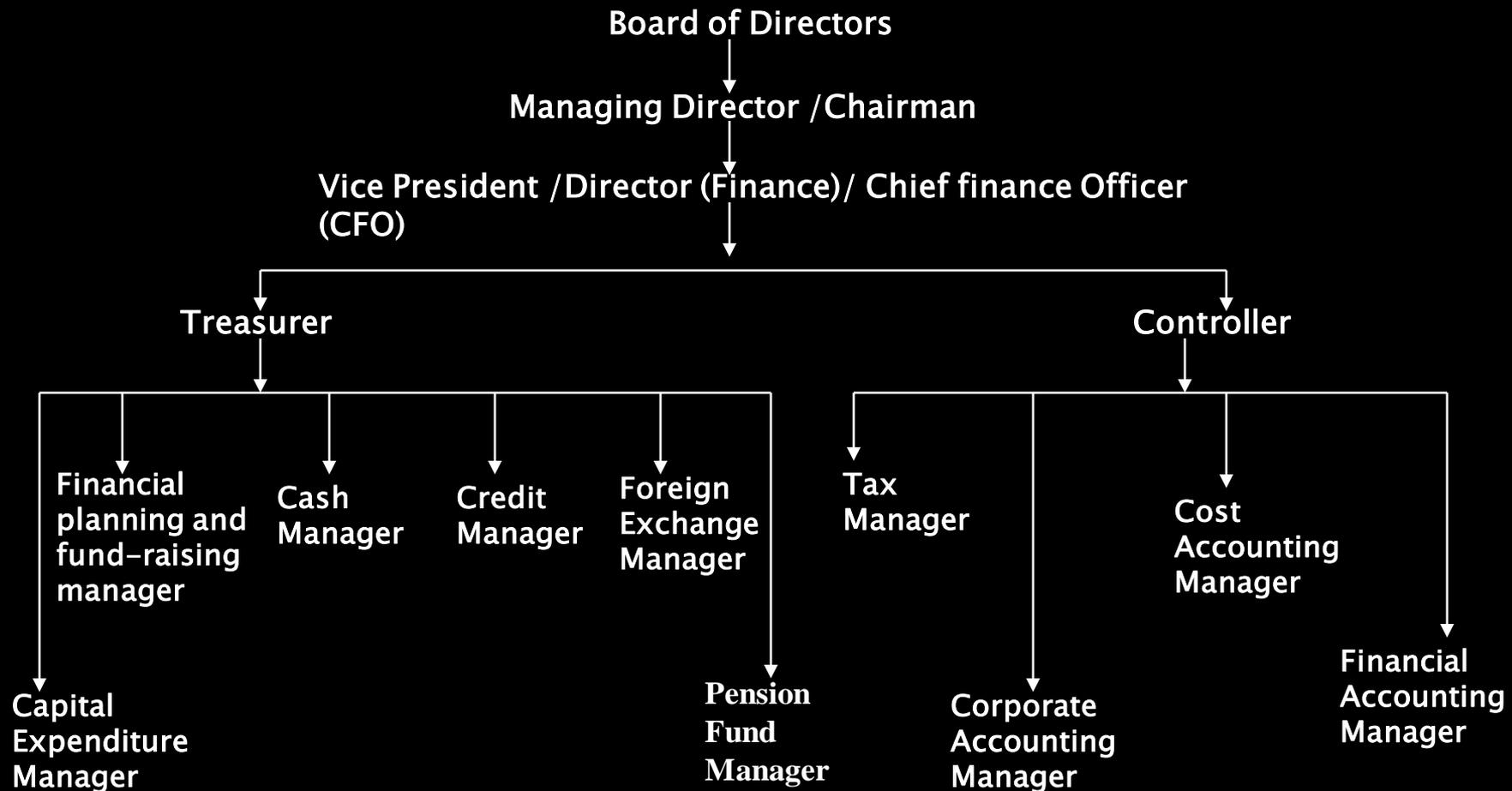
The financial requirements may be for a long term, medium term or short term.



Importance of Financial Management

- ▶ Financial Planning
- ▶ Acquisition of Funds
- ▶ Proper Use of Funds
- ▶ Financial Decision
- ▶ Improve Profitability
- ▶ Increase the Value of the Firm
- ▶ Promoting Savings

Organisation of Finance Function



Functions of Financial Manager

- ▶ Forecasting Financial Requirements
- ▶ Acquiring Necessary Capital
- ▶ Investment Decision
- ▶ Cash Management
- ▶ Interrelation with Other Departments

Scope of Financial Management

- ▶ It is broken down into three major decisions as a function of finance
 - Investment Decisions
 - Financing Decisions
 - Dividend Policy Decisions
 - **Investment Decision**
 - Investment decision relates to selections of asset in which funds will be invested by a firm
 - The asset that can be acquired by a firm may be long term asset and short term asset.

Scope of Financial Management

- Decision with regard to long term assets is called capital budgeting.
- Decision with regard to short term or current assets is called working capital management

- ***Capital Budgeting***

Capital budgeting relates to selection of an asset or investment

proposal which would yield benefit in future.

It involves three elements

- The measurement of the worth of the proposal
- Evaluation of the investment proposal in terms of risk associated with it
- Evaluation of the worth of the investment proposal against certain norms or standard. The standard is broadly known as cost of capital

Scope of Financial Management

- ***Working Capital Management***
 - Working Capital Management is concerned with the management of current assets
 - Proper management of working capital ensures firm's liquidity and solvency
 - The financial manager should develop proper techniques of managing current assets so that neither insufficient nor unnecessary funds are invested in current assets
- **Financing Decision**
 - Determination of the proportion of equity and debt is the main issue in financing decision
 - Once the best combination of debt and equity is determined, the next step is raising appropriate amount through available sources
 - Financing decision is concerned with the financing mix or capital structure

Scope of Financial Management

◦ Dividend Decision

- A firm distribute all profits or retain them or distribute a portion and retain the balance with it
 - Which course should be allowed? The decision depends upon the preference of the shareholders or investment opportunities available to the firm
 - Dividend decision has a strong influence on the market prize of the share
 - So the dividend policy is to be determined in terms of its impact on shareholder's value
 - The optimum dividend policy is one which maximizes the value of shares and wealth of the shareholders
- ▶ The above three decisions are inter related. To have an optimum financial decision the three should be taken jointly

Objectives of Financial Management

- The term ‘objective’ refers to a goal or decision for taking financial decisions
 - Profit maximization
 - Wealth maximization
- **Profit Maximization**
- It is the traditional approach of the Financial Management
- The firm should undertake those actions that would increase profits and drop those actions that would decrease profit
- The profit maximization goal implies that the Investment, Financing and Dividend decisions of the enterprise should be oriented to profit maximization
- It is an owner (Equity Share holders) oriented concept it refers to the amount and share of the income which is paid to the owners
- A short term horizon can fulfill objective of earning profit but may not help in creating wealth

Objectives of Financial Management

- This criterion is criticized on several ground
 - **Ambiguity**
 - The term profit is different for different persons, it may be gross profit or net profit or profit before tax or after tax
 - If profit maximization is taken to be the objective the question arises which profit should a firm try to maximize?
 - **Timing of Benefits**
 - While working with profitability ‘the bigger the better’ principle is adopted.
 - Ex : Time pattern of benefits

Year	Option A	Option B
1	50	–
2	100	100
3	50	100
Total	200	200

Objectives of Financial Management

- The total profit of A and B are equal. If you adopt this approach both the options are treated equally
- While the financial management says that ‘earlier is the better’ it means that you can reinvest your money which is occurred earlier and get more benefit
- It ignores the TIME VALUE OF MONEY

Objectives of Financial Management

■ Quality of Benefits

- The term quality that means the degree of certainty with which benefits can be expected
- As a rule, the more certain the expected return, the higher is the quality of the benefit because it is assumed that the investor can not take risk
- Ex: Uncertainty about the expected benefits

State of Economy	Option A	Option B
Recession – Y1	9	0
Normal– Y2	10	10
Boom – Y3	11	20
Total	30	30

- Profit maximization considers the size of the business and gives no weight to the degree of uncertainty
- Option B is more uncertain (risky) as they fluctuate widely but this criteria does not consider this as it considers only profit

Objectives of Financial Management

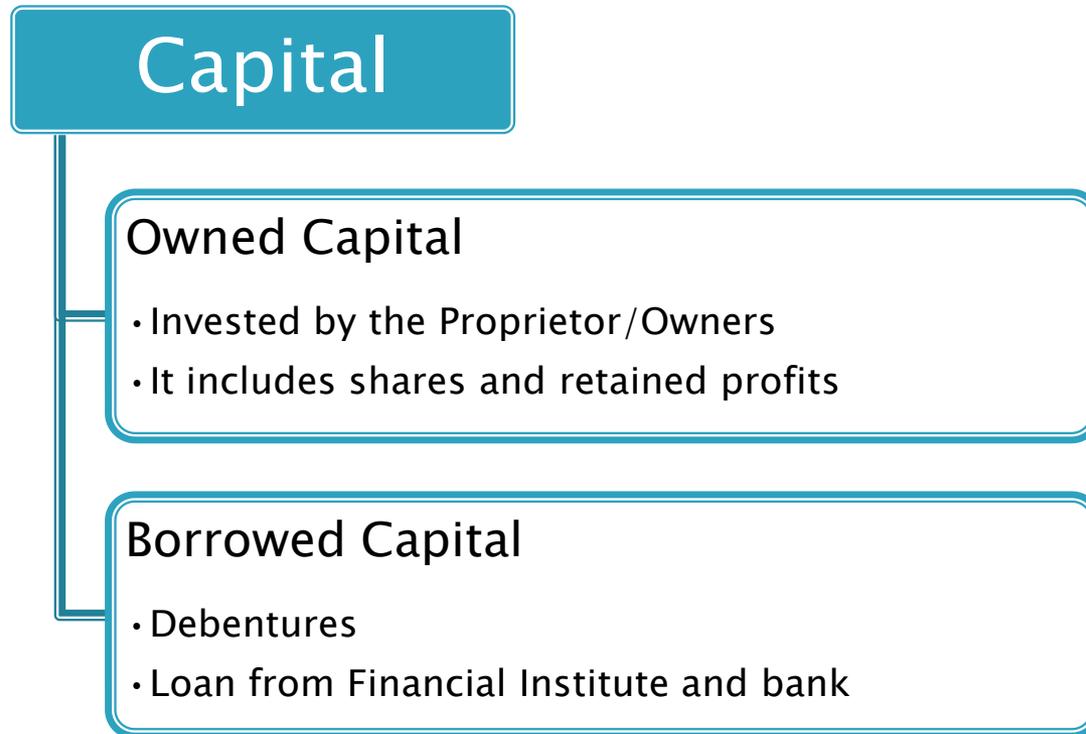
▶ **Wealth Maximization**

- It is also known as value or net present worth maximization
- Fundamental objective of wealth maximization is to maximize the market value of the firm's shares.
- It considers the cash flows rather than the profit
- It recognizes risk and uncertainty

Cost of Capital

What is Capital?

- ▶ Total wealth of the business



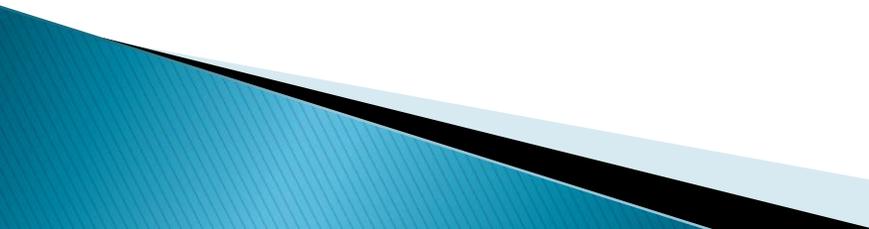
What is Share?

- ▶ The capital of a company is divided into shares.
- ▶ Each share forms a unit of ownership of a company and is offered for sale so as to raise capital for the company.
- ▶ Types of Shares
 - Equity Shares
 - Preference Shares

Equity Share

- ▶ Permanent source of capital
 - ▶ They are the owners of the company as they undertake the highest risk
 - ▶ Payment of dividend (return on the share) is made on shares
 - ▶ Equity Shares are the shares that carry voting rights and the rate of dividend also fluctuates every year
 - ▶ Such a shareholder has to share the profits and also bear the losses incurred by the company.
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Preference Share

- ▶ It carries two preferential rights
 - Payment of Dividend
 - Repayment of capital at the time of liquidation of company
 - ▶ Preference Shares are the shares that do not carry voting rights in the company
 - ▶ The rate of dividend is fixed to pay
 - ▶ Types of Preference share
 - **Cumulative** and Non Cumulative
 - Participating and **Non Participating**
 - **Redeemable** and Non Redeemable
 - Convertible and Non Convertible
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Equity Share & Preference share

No.	Equity Shares	Preference Shares
01	Nominal Value is Lower	Nominal Value is Higher
02	Dividend varies according to profit	Rate dividend is fixed
03	No right for arrears of dividend	Cumulative preference shares get arrears
04	No priority in dividend & repayment of capital	Priority in dividend & repayment of capital
05	Cannot be redeemed	Can be redeemed
06	There is more risk	The risk is lower
07	Equity shareholders have a voting right	Preference shareholders have no voting rights
08	Control over Management	No control over management
09	Highly speculative	Less speculative
10	Ready to take risk & to get greater dividend prefer this	Not ready to take risk & expect steady income prefer this

What is Debenture?

- ▶ A certificate representing Loans to a company
- ▶ It is very secured
- ▶ Interest is given to the debenture holders which is of fixed rate and on specified date irrespective of profit or loss
- ▶ It is a charged against profit
- ▶ The interest on debentures is tax free
- ▶ The repayment of debenture is fixed after a specific period of time
- ▶ Types of Debentures
 - Registered Debenture and Bearer Debenture
 - Secured / Mortgage Debentures and Unsecured Debentures
 - Redeemable Debentures and Non-redeemable Debentures
 - Convertible Debentures and Non Convertible Debentures

Difference between Shares and Debentures

BASIS FOR COMPARISON	SHARES	DEBENTURES
Meaning	The shares are the owned funds of the company.	The debentures are the borrowed funds of the company.
What is it?	Shares represent the capital of the company.	Debentures represent the debt of the company.
Holder	The holder of shares is known as shareholder.	The holder of debentures is known as debenture holder.
Status of Holders	Owners	Creditors
Form of Return	Shareholders get the dividend.	Debenture holders get the interest.
Payment of return	Dividend can be paid to shareholders only out of profits.	Interest can be paid to debenture holders even if there is no profit.
Allowable deduction	Dividend is an appropriation of profit and so it is not allowed as deduction.	Interest is a business expense and so it is allowed as deduction from profit.
Security for payment	No	Yes
Voting Rights	The holders of shares have voting rights.	The holders of debentures do not have any voting rights.
Conversion	Shares can never be converted into debentures.	Debentures can be converted into shares.
Repayment in the event of winding up	Shares are repaid after the payment of all the liabilities.	Debentures get priority over shares, and so they are repaid before shares.

Types of Capital

► Types of Capital

- Authorized Capital
 - Authorized capital is the maximum capital that a company is authorized to raise. It is mentioned in the Memorandum of Association
- Issued capital
 - Issued capital means that part of the authorized capital, which has been offered for subscription to members
- Subscribed capital
 - Subscribed capital means that part of the issued capital at nominal or face value which has been subscribed or taken up by purchaser of shares in the company and which has been allotted

Types of Capital

- Called-up capital
 - Called up capital is a part of subscribed capital which has been called up by the company for payment
- Paid-up capital
 - Paid Up capital refers to that part of the called up capital which has been actually paid by the shareholders

Cost of Equity

- ▶ The cost of equity is the return that stockholders require for their investment in a company
- ▶ Cost of equity share (k_e) is the part of cost of capital which allows the payment to only the equity shareholders.
- ▶ From company's perspective the company must earn more than cost of equity capital in order to be unaffected by the market value of the shares of its

Cost of Capital

- ▶ Ways to measure the equity shares are as follows
 1. Dividend Price Approach
 - Dividend Price Approach with constant dividend
 - Dividend Price Approach with constant growth
 2. Earning / Price Approach
 3. Realized yield Approach
 4. Capital-Asset Pricing Model

Cost of Equity

1. Dividend price approach

The cost of equity is the rate which equates the future dividend to the current market price

▶ Dividend price approach with constant dividend

In this approach the dividend is constant so there is no growth

▶ Cost of equity shares= Dividend per equity Market price

$$K_e = \frac{D}{P_0}$$

Where,

K_e = Cost of Capital

D = Expected Dividend

P_0 = Market Price of Equity

Cost of Equity

Dividend price approach with constant growth

- ▶ As per this approach the rate of dividend growth remains constant
- ▶ It is based on the theory that company is growing and its shares market value is also on growth. So, because of this shareholders are in need of simple dividend, so that company can provide the profit to them according to the growth. This is also known as Gordon growth model.

$$K_e = \frac{D_1}{P_0} + g$$

Where

$D_1 = [D_0(1+g)]$ Next Year's Expected annual Dividend per share

P_0 = Present Market price per share

g = constant growth on rate of dividend

Cost of Equity

- ▶ A Company has paid dividend of Rs. 1 per share (of face value Rs. 10 each) last year and it is expected to grow @ 10% next year. Calculate the cost of equity if the market price of share is Rs.55

$$K_e = \frac{D_1}{P_0} + g$$

$$\frac{1(1+0.1) + 0.1}{55} = 0.12 = 12\%$$

Cost of Equity

2. Earning/ Price Approach

- This approach co-relates the earning of the company with the market price
- The cost of equity share capital would be based upon the expected rate of earning of a company so We have to just write earning per share of company instead writing dividend per share

Earnings/ Price Approach with Constant Earnings:

$$K_e = \frac{E}{P}$$

Where,

E = Current earnings per share

P = Market share price

Cost of Equity

3. Realized yield Approach

- It computes cost of equity based on the past records of dividends actually realized by the equity share holders
- This approach has unrealistic assumptions like risks faced by the company remains the same, the shareholders continue to expect the same rate of return
- If the earning do not remain stable, this method is not practical

Cost of Equity

- ▶ 4. Capital Asset Pricing Model
 - It describes the linear relationship between Risk and Return on security. It provides a formula that calculates the expected return on a security based on its level of systematic risk.
 - Expected Return=Risk Free Rate + Risk Premium
 - **Expected Return= $R_f + \beta(R_m - R_f)$**
 - Where
 - R_f =Risk free return
 - β = beta coefficient for security (Beta reflects how risky an asset is compared to overall market risk)
 - R_m =Expected Market Return

Cost of Preference Share

- ▶ The cost of preference share capital is apparently the dividend which is committed and paid by the company.
- ▶ Although the dividend is not mandatory and it does not create legal obligation like debt, it has the preference of payment over equity for dividend payment and distribution of assets at the time of liquidation.
- ▶ Therefore, without paying the dividend to preference shares, they cannot pay anything to equity shares

Cost of Preference Share

- ▶ Types of Calculating Cost of Preference Share Capital
 - Cost of Irredeemable Preference Share Capital
 - Cost of Redeemable Preference Share Capital

Cost of Irredeemable Preference Share

- ▶ These shares are issued for the life of the company and are not redeemed. Cost of irredeemable preference shares can be calculated as follows

$$K_p \text{ (cost of pref. share)} = \frac{\text{Annual dividend of preference shares}}{\text{Market price of the preference stock}}$$

$$K_p = \frac{D_p}{P_0}$$

Example:

Let us calculate the cost of 10% preference capital of 10,000 preference shares whose face value is \$100. The market price of the share is currently \$115.

Annual dividend = 10% of \$100 = \$10 per share

$$K_p = \$10/\$115 = 8.7\%$$

Cost of Preference Share

1. Cost of Redeemable Preference Share Capital

- These shares are issued for a particular period and at the expiry of that period, they are redeemed and principal is paid back to the preference shareholders. The characteristics are very similar to debt and therefore the calculations will be similar too.
- $K_p = \frac{\text{Annual Dividend} + (\text{Redeemable Value} - \text{Sale value}) / \text{No of years for redemption}}{(\text{Redeemable Value} + \text{Sale value}) / 2}$

$$K_p = \frac{PD + \frac{(RV - NP)}{n}}{\frac{(RV + NP)}{2}}$$

Where,

PD	=	Annual preference dividend
RV	=	Redemption value of preference shares
NP	=	Net proceeds on issue of preference shares
n	=	Life of preference shares.

Cost of Preference Share

- ▶ **Example:** A company issues 10000, 8% preference shares of \$100 each redeemable after 20 years at face value. The floatation costs are \$3 per share.

Redeemable value = \$100;

Sale value = \$100-\$3 = \$97

Annual dividend = \$8 per share.

$$K_p = \frac{8 + (100 - 97) / 20}{(100 + 97) / 2} = 8.27\%$$

Cost of Debenture/Long term Debt

- ▶ Types of Calculating Cost of Debenture
 - Cost of Irredeemable Debentures
 - Cost of Redeemable Debentures

Cost of Debenture/Long term Debt

- Cost of Irredeemable Debentures

- The cost of debenture which are not redeemed by the issuer of the debenture is known as irredeemable debentures
- It is noted that the interest on cost of debt is tax free

$$K_d = \frac{I}{NP}(1-t)$$

Where,

K_d	=	Cost of debt after tax
I	=	Annual interest payment
NP	=	Net proceeds of debentures or current market price
t	=	Tax rate

Cost of Debenture/Long term Debt

- Cost of Redeemable Debenture

- These debts are issued for a particular period and at the expiry of that period, they are redeemed and principal is paid back to the debenture holders. The characteristics are very similar to redeemable preference share and therefore the calculations will be similar too.

$$(ii) \quad K_d = \frac{I + \frac{(RV - NP)}{n}}{\frac{(RV + NP)}{2}}(1-t)$$

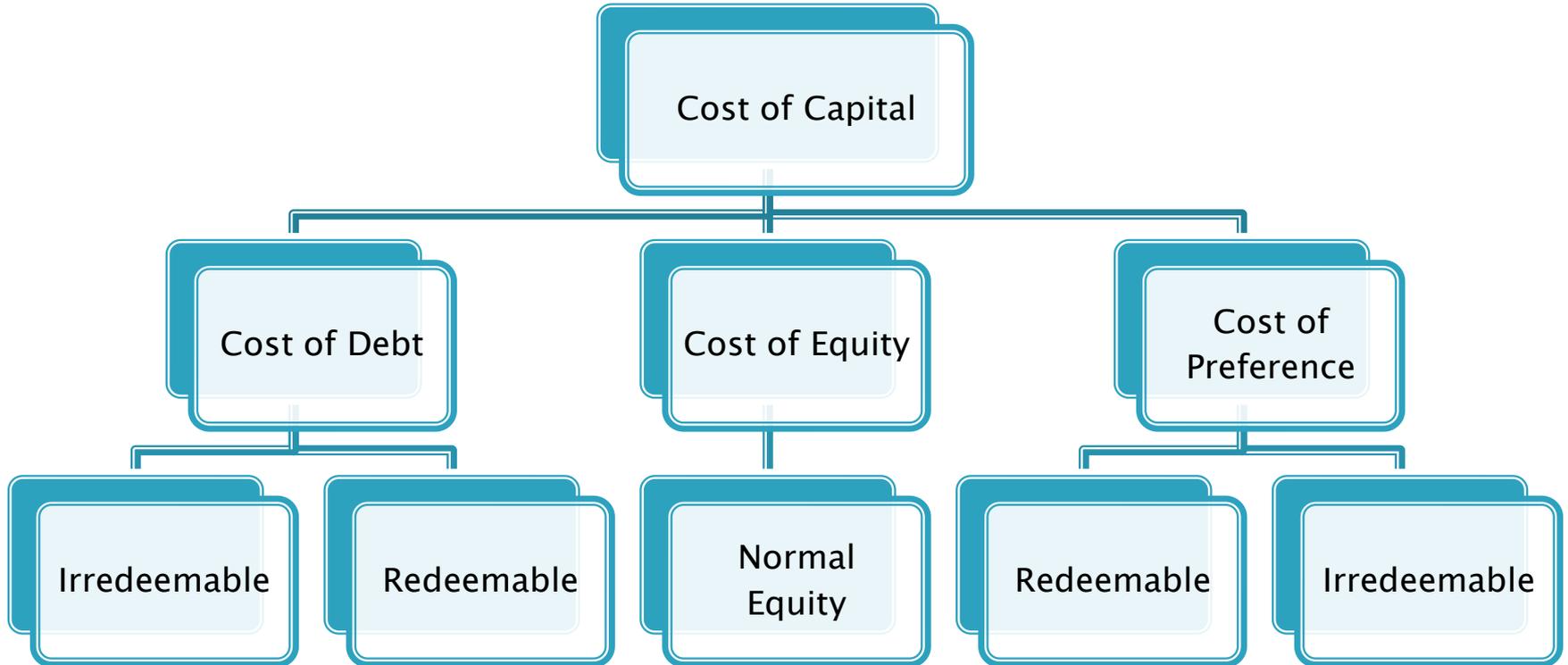
Where,

I	=	Interest payment
NP	=	Net proceeds from debentures in case of new issue of debt or Current market price in case of existing debt.
RV	=	Redemption value of debentures
t	=	Tax rate applicable to the company
n	=	Life of debentures.

Cost of Capital

- ▶ The overall percentage cost of the funds used to finance a firm's assets
- ▶ The overall cost of capital depends on the cost of each source and the proportion that source represents of all capital used by the firm
- ▶ The goal of business is to provide the return that is higher than the cost of capital

Cost of Capital



Cost of Capital

- ▶ Cost of Capital represents the cost of equity if the business is financed only through the equity share
- ▶ Cost of Capital represents the cost of debt if the business is financed only through the debt
- ▶ If a company use a combination of debt and equity to finance their businesses, and for such companies, their overall cost of capital is derived from a **Weighted Average Cost of Capital (WACC)**

Weighted Average Cost of Capital (WACC)

Example: Calculate WACC with the following information

Total Company's Capital = 10,00,000

Total Equity Capital= 400000

Total Debt = 600000

Cost of Equity = 10%

Cost of Debt=5%

Tax Rate = 35%

Answer:

Portion of equity on total capital

$$\frac{400000}{1000000} * 100 = 40\%$$

Portion of debt on total capital

$$\frac{600000}{1000000} * 100 = 60\%$$

$$\begin{aligned} \text{WACC} &= (\text{Proportion of Equity} * \text{Cost of Equity}) + [(\text{Proportion of Debt} * \text{Cost of Debt}) * (1 - \text{Tax Rate})] \\ &= (40\% * 10\%) + [(60\% * 5\%) * (1 - 0.35)] \\ &= (0.4 * 0.1) + [(0.6 * 0.05) * 0.65] \\ &= 0.04 + 0.0195 \\ &= 0.0595 \\ &= 5.95\% \end{aligned}$$

Capital Gearing

- ▶ The term ‘capital gearing’ refers to the relationship between equity capital (equity shares plus reserves) and long-term debt.
- ▶ In simple words, capital gearing means the ratio between the various types of securities in the capital structure of the company
- ▶ A company is said to be in high-gear, when it has a proportionately higher/large issue of debentures and preference shares for raising the long-term resources, whereas low-gear stands for a proportionately large issue of equity shares

Capital Gearing

- ▶ The example given below illustrates clearly the terms 'high gear' and 'low gear':

Extracts of Balance Sheets		
<i>Liabilities</i>	<i>A. Ltd.</i> ₹	<i>B. Ltd.</i> ₹
Equity Share Capital	4,00,000	6,00,000
10% Preference Share Capital	3,00,000	2,00,000
9% Debentures	3,00,000	2,00,000
	10,00,000	10,00,000

The total capitalization of the above two companies is the same i.e.

Rs. 10,00,000 for each company, but the capital structure differs. A Ltd. is high geared as the ratio of equity capital in the total capitalization of the company is only 40%. But B. Ltd. is low geared as its capital structure comprises of 60% of equity capital and only 40% of the fixed cost bearing securities.

Capital Gearing

- ▶ **Capital gearing ratio** is a useful tool to analyze the capital structure of a company
- ▶ Gearing is inverse to the equity
 - High Debt -> High Geared
 - Low Debt -> Low Geared

$$\text{Capital gearing ratio} = \frac{\text{Common stockholders' equity}}{\text{Fixed interest bearing funds}}$$

Or

$$\text{Capital gearing ratio} = \text{Common stockholders' equity} : \text{Fixed interest bearing funds}$$

Capital Gearing Ratio

	<u>2011</u>	<u>2012</u>
Common stockholders' equity	3,500,000	2,800,000
Preferred stock – 9%	1,400,000	1,800,000
Debentures payable – 6%	1,600,000	1,400,000

The following information have been taken from the balance sheet of PQR limited:

We can compute the capital gearing ratio for the years 2011 and 2012 from the above information as follows:

For the year 2011:

Capital gearing ratio = 3,500,000 : 3,000,000
= 7 : 6 (Low geared)

For the year 2012:

Capital gearing ratio = 2,800,000 : 3,200,000
= 7 : 8 (Highly geared)

The company has a low geared capital structure in 2011 and highly geared capital structure in 2012.

Leverage

- ▶ A lever is a force in a car or in any machine which helps in doing more work with lesser labor.
- ▶ Finance manager uses this tool for making effective financial structure of company
- ▶ Financial structure is just mix of debt and equity and with help of leverage , finance manager gets fund with effective ratio of debt and equity

Leverage

▶ Leverage in Real Estate

Ex : A company want to purchase a property worth Rs.10,00,000. But you have only 200,000. So you go to the bank for loan of 8,00,000. Bank request to supply 20% of your profit as a down payment of the property. So you will invest your 200,000 and get the ownership of the property.

So you have the leverage of 5:1. Because your 200000 is 1/5 of the 10,00,000.

After 1 year property market appreciated by 50%. And you decide to sell your property of 10,00,000. So it will give you the profit of 500,000.

If you had not taken a loan than you can invest only Rs.2,00,000 to purchase the asset and after 1 year you will get on profit of Rs.1,00,000

Leverage

- ▶ Main aim of leverage testing is maximize the earning of shareholder and reduce the risk of company
- ▶ Leverage it is not without risk
- ▶ There are mainly 3 types of Leverages
 - Financial
 - Operating
 - Combined

Financial Leverage

- ▶ It depends on the proper mix of equity and debt
- ▶ Financial leverage refers to the use of debt to acquire additional profit
- ▶ The more debt financing a company uses, the higher its financial leverage. A high degree of financial leverage means high interest payments, which negatively affect the company's bottom-line earnings per share
- ▶ A firm is known to have a favorable leverage if its earnings are more than what debt would cost. On the contrary, if it does not earn as much as the debt costs then it will be known as an unfavorable leverage.

Operating Leverage

- ▶ Every business has certain fixed cost and variable cost.
- ▶ Fixed cost remains fixed irrespective of sales volume
- ▶ Operating leverage is a measurement of the degree to which a firm incurs a combination of fixed and variable costs
- ▶ OL is the concept of using your fixed cost to its maximum potential to bring down the total cost per unit of a product

For ex. You are paying rent of 10,000 and you are producing 100 units. So, per unit fixed cost is 100. But if you are producing 500 units than the fixed cost per unit is Rs. 20. So by producing more number of units you can bring down the price

- ▶ The occurrence is known as operating leverage. The degree of operating leverage depends upon the amount of fixed elements in the cost structure
- ▶ The higher the proportion of fixed operating cost in the cost structure, higher is the degree of operating leverage

Combined Leverage

- ▶ Operating leverage is concerned with operating risk and Financial leverage is associated with financial risk
- ▶ Both the leverages are concerned with fixed charges. If we combine these two we will get the total risk of a firm that is associated with total leverage or combined leverage of the firm
- ▶ The firm's ability to cover the aggregate of fixed operating and financial charges is termed as combined leverage

How to Calculate OL and FL?

Sales	-----
- Variable Cost	-----
Contribution	XXXXXX
- Fixed Cost	-----
EBIT	XXXXXX
-Interest	-----
EBT	XXXXXX

$$DOL = \frac{\text{Contribution}}{\text{EBIT}}$$

$$DFL = \frac{\text{EBIT}}{\text{EBT}}$$

$$DCL = \frac{\text{Contribution}}{\text{EBT}}$$